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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,867	12/17/2001	Thomas Joseph Kopacz	1443.009US1	5354

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EXAMINER

BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,867

Applicant(s)

KOPACZ ET AL.

Examiner

Jennifer A. Boyd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-16,20-26,28-31,33,40-57,59-63,65-72,79-81 and 83-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-16,20-26,28-31,33,40-57,59-63,65-72,79-81 and 83-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Applicant's Amendments and Accompanying Remarks, filed March 14, 2006, have been entered and have been carefully considered. Claims 1, 5-7, 16, 22, 50, 54, 61, 62, 65, 67, 71, 79-81, 83, 87 and 89 are amended, claims 73-78 and 82 are canceled herein and claims 1, 3-16, 20-26, 28-31, 33, 40-57, 59-63, 65-72, 79-81 and 83-90 are pending. In view of Applicant's clarification of the terms "tuft" and "projection" and the amendments made to the claims, the Examiner withdraws all previously set forth rejections as detailed in the previous Office Action. The invention as currently claimed is unpatentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 5 - 7, 12 - 15, 50 - 53, 60 - 63, 65 - 68, 72, 79, 80 - 81, 83 - 88 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raidel et al. (WO 96/00625) in view of Mende (US 5,180,620). It should be noted that the Examiner has relied upon Raidel et al. (US 6,171,682) as an English language equivalent of (WO 96/00625).

Raidel is directed to an absorbent article comprising a corrugated web (Title).

As to claims 1, 5 - 7, 50, 60 - 62, 65 - 68, 72, 80 - 81, 83 - 86 and 87 - 88, Raidel teaches an absorbent article in Figures 19 and 20 comprising an outer cover sheet 201, a pleated cover sheet 203, a pleated absorbent body 205 and a liquid impermeable cover sheet 204 (column 10, lines 45 - 65). The Examiner equates the outer cover sheet 201 and pleated cover

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sheet 203 to one of Applicant's "bi-layer structures" and the pleated absorbent body 205 and liquid impermeable cover sheet 204 to the other of Applicant's "bi-layer structures". The Examiner submits that the pleated cover sheet 203 and pleated absorbent body 205 are equated to "at least one inner layer". Raidel does not teach or suggest the use of elastic materials or fibers; the Examiner submits that the limitation of having "no elastic materials or fibers between the outer layers" has been met by Raidel. As shown in Figures 19 and 20, a void volume exists between the valleys as required by Applicant. It should be noted that any thermoplastic material can be bonded. It should be noted that Applicant requires that the projections are "bondable" and does not require that they are actually bonded.

As to claims 60 – 62, Raidel teaches that the liquid-permeable cover layer can comprise multiple layers (column 11). The Examiner equates one of the multiple layers to Applicant's "additional layer".

As to claim 63, Raidel teaches that the liquid-permeable cover layer can comprise multiple layers (column 11). The Examiner equates one of the multiple layers to Applicant's "additional layer".

As to claims 79 and 81, Figures 19 and 20 show a void volume which exists between the valleys as required by Applicant.

Raidel fails to teach that the at least one inner layer is a tufted material having a plurality of projections, each of the plurality of projections surrounded by a valley as required by claims 1, 5, 50, 65, 83 and 87 formed by porous forming surface as required by claims 87 and 90. Raidel fails to teach that the projections are between 3 mm and 5 mm in length as required by claims 12

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and 53, at least about 1 mm in length as required by claims 13 and 50, at least about 2 mm in length as required by claims 14 and 51 at least about 3 mm in length as required by claims 15 and 52.

Mende is directed to a nonwoven fabric comprising meltblown fibers having projections extending from the fabric base (Title) suitable for applications such as wiper (column 1, lines 60 – 65) or sanitary products (column 9, lines 45 – 55). Mende teaches a bulky nonwoven fabric made of thermoplastic filaments, which is soft and highly permeable to water and gas and effectively absorbs moisture as well as shocks (column 2, lines 59 – 65). Mende teaches that the fabric is provided with projections by using a porous plate (column 3, lines 40 – 69 and column 4, lines 1 – 35). Mende teaches using a metal net as the porous plate (column 11). It should be noted that the porous metal net would provide uniform and identifiable pattern of projections. The Examiner equates the material comprising projections to Applicant's "tufted material". Mende teaches Examples where the projection height is 1.4 mm (Example 1), 2.4 mm (Example 2) and 0.8 mm (Example 3) (columns 9 – 11). Mende notes that height of the projection is at least four times as large as the thickness of the base layer to make the nonwoven fabric appear and feel bulky; when the height of the projections is less than twice as high as the thickness of the base layer, the nonwoven fabric loses its bulky appearance (column 7, lines 10 – 30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use uniformly tufted material made by a porous forming surface for the inner layers as suggested by Mende in the laminate of Raidel motivated by the desire to create a composite suitable for wiping applications that is soft and highly permeable to water and gas and effectively absorbs moisture as well as shocks (column 2, lines 59 – 65).

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It would have been obvious to one of ordinary skill in the art at the time invention was made to create tufted material having a projection height of at least about 1 mm (Mende's embodiment with a height of 1.4 mm) and at least about 2 mm (Mende's embodiment with a height of 2.4 mm) as suggested by Mende in the laminate of Raidel motivated by the desire to create a wipe with a bulky feel and appearance suitable for wiping applications.

Raidel in view of Mende fails to disclose that the projection height is at least about 3 mm and can range from 3 mm to 5 mm. However, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the projection height based on the thickness of the fabric and the level of desired bulk since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the height of the tuft projections based on the desired level of bulk.

4. Claims 22 – 26, 28 – 31, 33, 54 – 57, 59 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raidel et al. (WO 96/00625) in view of Mende (US 5,180,620) and further in view of Osborne et al. (US 6,716,441).

It should be noted that the Examiner has relied upon Raidel et al. (US 6,171,682) as an English language equivalent of (WO 96/00625).

Raidel is directed to an absorbent article comprising a corrugated web (Title).

As to claims 22 and 54, Raidel teaches an absorbent article in Figures 19 and 20

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comprising an outer cover sheet 201, a pleated cover sheet 203, a pleated absorbent body 205 and a liquid impermeable cover sheet 204 (column 10, lines 45 – 65). Raidel does not teach or suggest the use of elastic materials or fibers; the Examiner submits that the limitation of having “no elastic materials or fibers between the outer layers” has been met by Raidel. As shown in Figures 19 and 20, a void volume exists between the valleys as required by Applicant.

As to claims 25 – 26, Raidel teaches that the absorbent article is suitable for applications for absorbing body fluids such as feminine care articles, diapers, incontinence pads, etc. (column 7, lines 45 – 65). It should be noted that these articles are known in the art to be disposable. It should be noted that the Examiner has given no patentable weight to “personal care wet wipe” because the claims are devoid of any structure. Furthermore, it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). The burden is upon the Applicant to prove that the absorbent article of Raidel cannot be used for Applicant’s desired applications.

Raidel fails to teach that the at least one inner layer is a tufted material having a plurality of projections, each of the plurality of projections surrounded by a valley as required by claims 22 and 54 having an identifiable uniform pattern of projections as required by claims 33 and 59. Raidel fails to teach that the projections are between 3 mm and 5 mm in length as required by claims 28 and 57, at least about 1 mm in length as required by claims 29 and 54 at least about 2 mm in length as required by claims 30 and 55 and at least about 3 mm in length as required by claims 31 and 56.

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Mende is directed to a nonwoven fabric comprising meltblown fibers having projections extending from the fabric base (Title) suitable for applications such as wiper (column 1, lines 60 – 65) or sanitary products (column 9, lines 45 – 55). Mende teaches a bulky nonwoven fabric made of thermoplastic filaments, which is soft and highly permeable to water and gas and effectively absorbs moisture as well as shocks (column 2, lines 59 – 65). Mende teaches that the fabric is provided with projections by using a porous plate (column 3, lines 40 – 69 and column 4, lines 1 – 35). Mende teaches using a metal net as the porous plate (column 11). It should be noted that the porous metal net would provide uniform and identifiable pattern of projections. The Examiner equates the material comprising projections to Applicant's "tufted material". Mende teaches Examples where the projection height is 1.4 mm (Example 1), 2.4 mm (Example 2) and 0.8 mm (Example 3) (columns 9 – 11). Mende notes that height of the projection is at least four times as large as the thickness of the base layer to make the nonwoven fabric appear and feel bulky; when the height of the projections is less than twice as high as the thickness of the base layer, the nonwoven fabric loses its bulky appearance (column 7, lines 10 – 30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use uniformly tufted material for the inner layers as suggested by Mende in the laminate of Raidel motivated by the desire to create a composite suitable for wiping applications that is soft and highly permeable to water and gas and effectively absorbs moisture as well as shocks (column 2, lines 59 – 65).

It would have been obvious to one of ordinary skill in the art at the time invention was made to create tufted material having a projection height of at least about 1 mm (Mende's embodiment with a height of 1.4 mm) and at least about 2 mm (Mende's embodiment with a

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height of 2.4 mm) as suggested by Mende in the laminate of Raidel motivated by the desire to create a wipe with a bulky feel and appearance suitable for wiping applications.

Raidel in view of Mende fails to disclose that the projection height is at least about 3 mm and can range from 3 mm to 5 mm. However, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the projection height based on the thickness of the fabric and the level of desired bulk since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the height of the tuft projections based on the desired level of bulk.

Raidel in view of Mende fail to teach that the absorbent article comprises an added liquid to provide suitable wiping properties as required by claims 22, 54 and 89, the added liquid is selected from the group consisting of water, emollients, surfactants, fragrances, preservatives, chelating agents, pH buffers and combinations thereof as required by claim 23 and further comprising an additive selected from the group consisting of lotions, medicaments and combinations thereof as required by claim 24.

Osborne is directed to a novel composition to be applied to the skin using a dispensing means such as an absorbent article, wipe, bandage, etc. (Abstract). Osborne teaches that the composition comprises emollients, which can function as Applicant's "lotion", which supple, smooth, soften, coat and lubricate the skin (column 3, lines 25 – 35). Additionally, the

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composition may comprise pH control agents, chelating agents among other skin care active agents.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include skin care active agents such as emollients, pH control agents and chelating agents as suggested by Osborne in the laminate of Raidel in view of Mende motivated by the desire to create a laminate which is skin care friendly for disposable article applications.

5. Claims 1, 3 – 16, 20 – 21, 50 – 53, 65 – 72, 79 – 81, 83 – 88 and 90 are rejected under 35 U.S.C. 102(e) as being anticipated by Curro et al. (US 6,808,791) in view of Mende (US 5,180,620).

Curro is directed to a laminate web useful for absorbent applications such as pads, wipes, etc. (Abstract).

Curro teaches a laminate comprising a first outer ply 20, a central layer 30 and a second outer ply 40 (columns 6 – 7). See Figure 2. The outer layers may comprise nonelastic materials such as meltblown webs of polypropylene, polyethylene, etc. and may be a composite of two or more fibers such as meltblown fibers mixed with wood pulp (column 17, lines 1 – 30). The outer layers may also be multilayered materials (column 17, lines 1 – 30). The Examiner equates a multi-layered first outer ply of a meltblown web and a material of meltblown fibers and wood pulp (coform) to one of Applicant's "bi-layer structures" and a multi-layered second outer ply of a meltblown web and a material of meltblown fibers and wood pulp (coform) to the other of Applicant's "bi-layer structures".

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Curro fails to teach that the at least one inner layer is a tufted material having a plurality of projections, each of the plurality of projections surrounded by a valley as required by claims 1, 5, 50, 65, 83 and 87 formed by porous forming surface as required by claims 87 and 90 which produces a substantially uniform and identifiable pattern as required by claim 20. Raidel fails to teach that the projections are between 3 mm and 5 mm in length as required by claims 12 and 53, at least about 1 mm in length as required by claims 13 and 50, at least about 2 mm in length as required by claims 14 and 51 and at least about 3 mm in length as required by claims 15 and 52.

Mende is directed to a nonwoven fabric comprising meltblown fibers having projections extending from the fabric base (Title) suitable for applications such as wiper (column 1, lines 60 – 65) or sanitary products (column 9, lines 45 – 55). Mende teaches a bulky nonwoven fabric made of thermoplastic filaments, which is soft and highly permeable to water and gas and effectively absorbs moisture as well as shocks (column 2, lines 59 – 65). Mende teaches that the fabric is provided with projections by using a porous plate (column 3, lines 40 – 69 and column 4, lines 1 – 35). Mende teaches using a metal net as the porous plate (column 11). It should be noted that the porous metal net would provide uniform and identifiable pattern of projections. The Examiner equates the material comprising projections to Applicant's "tufted material". Mende teaches Examples where the projection height is 1.4 mm (Example 1), 2.4 mm (Example 2) and 0.8 mm (Example 3) (columns 9 – 11). Mende notes that height of the projection is at least four times as large as the thickness of the base layer to make the nonwoven fabric appear and feel bulky; when the height of the projections is less than twice as high as the thickness of the base layer, the nonwoven fabric loses its bulky appearance (column 7, lines 10 – 30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use uniformly tufted material made by a porous forming surface for the inner layers as suggested by Mende in the laminate of Curro motivated by the desire to create a composite suitable for wiping applications that is soft and highly permeable to water and gas and effectively absorbs moisture as well as shocks (column 2, lines 59 – 65).

It would have been obvious to one of ordinary skill in the art at the time invention was made to create tufted material having a projection height of at least about 1 mm (Mende's embodiment with a height of 1.4 mm) and at least about 2 mm (Mende's embodiment with a height of 2.4 mm) as suggested by Mende in the laminate of Curro motivated by the desire to create a wipe with a bulky feel and appearance suitable for wiping applications.

Curro in view of Mende fails to disclose that the projection height is at least about 3 mm and can range from 3 mm to 5 mm. However, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the projection height based on the thickness of the fabric and the level of desired bulk since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the height of the tuft projections based on the desired level of bulk.

Response to Arguments

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6. Applicant's arguments with respect to claims 1, 3-16, 20-26, 28-31, 33, 40-57, 59-63, 65-72, 79-81 and 83-90 have been considered but are moot in view of the new ground(s) of rejection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jennifer Boyd
May 23, 2006


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